Claims

1   (Currently Amended) A method for managing removable storage ~~media~~ cartridges, comprising:

    determining that a first removable storage ~~media~~ cartridge on which data is stored needs to be replaced, said first removable storage ~~media~~ cartridge is identified by a persistent worldwide name, wherein said persistent worldwide name is stored in a first cartridge memory of said first removable storage cartridge;

    creating a copy of said data on a second removable storage ~~media~~ cartridge;

    assigning said persistent worldwide name to said second removable storage ~~media~~ cartridge, and storing said persistent worldwide name in a second cartridge memory of said second removable storage cartridge.

2   (Currently Amended) The method of claim 1, further comprising:

    removing said persistent worldwide name from said first removable storage ~~media~~ cartridge.

3   (Currently Amended) The method of claim 1, wherein the determining step further comprises:

    detecting a failure of said first removable storage ~~media~~ cartridge.

4   (Currently Amended) The method of claim 1, wherein the determining step further comprises:

    detecting a reduced performance of said first removable storage ~~media~~ cartridge.

5   (Currently Amended) The method of claim 1, further comprising:

    using a user interface to direct a library controller to replace said first removable storage ~~media~~ cartridge.

6   (Currently Amended) The method of claim 1, wherein the determining step further comprises:

    detecting a need for an upgrade of said first removable storage ~~media~~ cartridge.

7   (Original) The method of claim 1, wherein the creating step further comprises:

    obtaining said copy of said data by RAID parity calculations.

8   (Original) The method of claim 1, wherein the creating step further comprises:

    obtaining said copy of said data from a backup copy of said data.

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9   (Original) The method of claim 1, wherein the creating step further comprises:

   obtaining said copy of said data by reconstruction of said data from one or more
   sources.

10 (Canceled).

11 (Canceled).

12 (Currently Amended) The method of claim 1, further comprising:

   creating a copy of a contents of <u>said</u> first cartridge memory of said first removable
   storage <s>media</s> <u>cartridge</u> in said second cartridge memory of said second
   removable storage <s>media</s> <u>cartridge</u>.

13 (Currently Amended) A system for managing removable storage <s>media</s> <u>cartridges</u>
   comprising:

   a first removable storage <s>media</s> <u>cartridge</u> for storing data<u>, comprising a first
   cartridge memory</u>;

   a persistent worldwide name associated with said <s>a</s> first removable storage <s>media</s>
   <u>cartridge, wherein said persistent worldwide name is stored within said first
   cartridge memory</u>;

   a second removable storage <s>media</s> cartridge<u>, comprising a second cartridge
   memory</u>;

   a processor coupled to said first removable storage <s>media</s> <u>cartridge</u> and coupled to
   said second removable storage <s>media</s> <u>cartridge</u>, wherein said processor creates a
   copy of said data on said second removable storage <s>media</s> <u>cartridge</u> and assigns
   said persistent worldwide name to said second removable <s>media</s> <u>cartridge; and</u>
   <u>wherein said processor stores said persistent worldwide name in said second
   cartridge memory</u>.

14 (Currently Amended) The system of claim 13, wherein said processor removes said
   persistent worldwide name from said first removable storage <s>media</s> <u>cartridge</u>.

15 (Currently Amended) The system of claim 13, further comprising:

   a failure detection apparatus for detecting a failure of said first removable storage
   <s>media</s> <u>cartridge</u>.

16 (Currently Amended) The system of claim 13, further comprising:

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a performance detection apparatus for detecting a performance of said first removable storage ~~media~~ <u>cartridge</u>.

17 (Currently Amended) The system of claim 13, further comprising:

an upgrade detection apparatus for detecting a need for an upgrade of said first removable storage ~~media~~ <u>cartridge</u>.

18 (Currently Amended) The system of claim 13, further comprising:

a library controller; and

a user interface coupled to said library controller, wherein said user interface is used for inputting information to direct said library controller to replace said first removable storage ~~media~~ <u>cartridge</u>.

19 (Original) The system of claim 13, further comprising:

At least one RAID device coupled to said processor, wherein said processor obtains said copy of said data by RAID parity calculations.

20 (Original) The system of claim 13, further comprising:

A backup storage device coupled to said processor, wherein said processor obtains said copy of said data from said backup storage device.

21 (Original) The system of claim 13, further comprising:

one or more storage devices coupled to said processor, wherein said processor obtains said copy of said data from said one or more storage devices by reconstruction of data from said one or more sources.

22 (Canceled).

23 (Canceled).

24 (Currently Amended) An automated data storage library comprising a system for managing removable storage ~~media~~ <u>cartridges</u> comprising:

a first removable storage ~~media~~ <u>cartridge</u> for storing data<u>, comprising a first cartridge memory</u>;

a persistent worldwide name associated with said first removable storage ~~media~~ <u>cartridge, wherein said persistent worldwide name is stored within said first cartridge memory</u>;

a second removable storage ~~media~~ <u>cartridge, comprising a second cartridge memory</u>;

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a processor coupled to said first removable storage ~~media~~ cartridge and coupled to said second removable storage ~~media~~ cartridge, wherein said processor creates a copy of said data on said second removable storage ~~media~~ cartridge and assigns said persistent worldwide name to said second removable ~~media~~ cartridge; and wherein said processor stores said persistent worldwide name in said second cartridge memory.

25 (Currently Amended) An article of manufacture comprising a data storage medium tangibly embodying a program of machine-readable instructions executable by a digital processing apparatus to perform method steps for managing removable storage ~~media~~ cartridges, comprising:

determining that a first removable storage ~~media~~ cartridge identified by a persistent worldwide name needs to be replaced, wherein data is stored on said first removable storage ~~media~~ cartridge, wherein said persistent worldwide name is stored in a first cartridge memory of said first removable storage cartridge;

creating a copy of said data on a second removable storage ~~media~~ cartridge;

assigning said persistent worldwide name to said second removable storage ~~media~~ cartridge, and storing said persistent worldwide name in a second cartridge memory of said second removable storage cartridge.

26 (Currently Amended) The article of manufacture of claim 25, wherein said method further comprises:

removing said persistent worldwide name from said first removable storage ~~media~~ cartridge.

27 (Currently Amended) The article of manufacture of claim 25, wherein the determining step further comprises:

detecting a failure of said first removable storage ~~media~~ cartridge.

28 (Currently Amended) The article of manufacture of claim 25, wherein the determining step further comprises:

detecting a reduced performance of said first removable storage ~~media~~ cartridge.

29 (Currently Amended) The article of manufacture of claim 25, further comprising:

using a user interface to direct a library controller to replace said first removable storage ~~media~~ cartridge.

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